

Sovereign and Public Sector

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1. Introduction

This report sets out our methodology for rating supranational entities globally. Supranational entities play an important role in international financial markets. Owned by sovereigns¹, supranationals issue bonds in global capital markets, usually lend to their borrowing member countries² and engage directly with the private sector in those countries via either loans, equity investments, guarantees or grants. Examples of supranationals are multilateral development banks (MDBs), supranational financial guarantors, and vehicles that provide budgetary financing.

Most supranationals are mandated to support the long-term economic development of their member countries. Supranational activities comprise pure financing including counter-cyclical and crisis lending, the provision of loans to incentivise countries to pursue reforms, and the creation and dissemination of technical assistance and research. Typical income sources include interest revenue, dividends from investments in equities and returns on debt instruments. Supranationals usually reinvest or retain income to boost capital buffers, or use income to finance the provision of grants, concessional lending, technical assistance, and operational expenses. Supranationals are therefore driven by their mandate – not by profit – and are thus important instruments for governments to achieve their policy objectives³.

1.1 Definitions

Our methodology sets out our approach to assigning long-term and short-term issuer and debt ratings⁴ in line with our ratings scale and definitions of default. Our methodology defines supranational entities as autonomous international institutions founded by at least two sovereign governments⁵, usually under international law, or an inter-governmental treaty or similar agreement with a mandate to achieve a policy-oriented outcome rather than to maximise profits for shareholders⁶.

Usually, supranational entities are highly capitalised; rely mostly on wholesale funding instead of deposits; typically have no recourse to a 'lender of last resort'; have no nationality and are thus exempt from national taxation laws and banking requirements, making them essentially self-regulated; often obliged to take on risks the private sector is unwilling or unable to assume, as they are not profit-driven; often not obliged to pay dividends to shareholders, allowing them to build higher risk buffers through retained earnings; and most benefit from preferred creditor status (PCS) among their sovereign borrowers. Some have private shareholders while others have no equity or even a balance sheet and thus operate as agents of governments with recourse only to their shareholders. Supranationals generally have strong credit quality and, to date, we are not aware of any that have defaulted. A non-exhaustive list of supranational entities is provided in Annex 1.

1.2 Summary of our 'mandate-driven' approach

Supranational institutions have a separate legal personality from their shareholders and enjoy a broad range of privileges and immunities. This is because they are usually set up under international law and thus shielded from national jurisdictions. Our approach therefore acknowledges supranationals' ability to operate and honour financial commitments independently of national legal systems, regulations and policy frameworks. In principle, this justifies supranationals being rated higher than their respective shareholder governments. In addition, our approach balances i) the diverse universe of supranational entities, accounting for their distinct institutional setups; and ii) the operational considerations of supranationals that are distinct to those of commercial entities⁷.

We therefore distinguish between supranationals that are i) capitalised and derive their creditworthiness primarily via their intrinsic strength (mostly multilateral development banks); and ii) not capitalised and derive their creditworthiness primarily from the support of their shareholders. These approaches thus balance the key rating drivers depending on the setup of the supranational.

Specifically, for capitalised institutions, we start with an assessment of intrinsic strength, which is then complemented with our shareholder support assessment to determine the final rating. Conversely, for non-capitalised institutions, we begin with our shareholder support assessment which is then complemented with our assessment of intrinsic strength to determine the final rating.

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¹ Few supranational institutions also have private minority shareholders and/or other supranationals.

Supranationals may also lend to non-members if this is in the interest of the shareholders.

Scope is mindful that some institutions follow a more profit-oriented approach than others.

⁴ In case a supranational issues an instrument that is not a senior unsecured debt obligation, this would be assessed on a case by case basis.

⁵ Or in turn, entities fully owned and acting on behalf of those sovereign governments.

⁶ This methodology is generally not applicable to multilateral insurance companies.

See Humphrey (2015, 2017a, 2017b) who discusses the special status of MDBs vs. commercial banks.



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Figure 1: Overview of Scope's 'mandate-driven' approach

For capitalised institutions

Intrinsic Strength (85%)								
Institutional Profile (15%) Financial Profile (85%)								
Mandate & ESG	Capitalisation (30%)	Asset Quality (30%)	Liquidity & Funding (40%)					
Excellent - Very Weak								

Shareholder Support (Shareholder Support (15%)					
Shareholder Strength (60%)	Extraordinary Support (40%)					
Excellent - Moderate						

Indicative Rating

Additional considerations

Final Rating

For non-capitalised institutions

Shareholder Support*	
Shareholder Strength (90%)	Extraordinary Support (10%)
AAA - CCC	

Intrinsic Strength*						
Institutional Profile (20%) Financial Profile (80%)						
Mandate & ESG	Asset Quality Liquidity & Fur (40%) (60%)					
Excellent - Very Weak						

Indicative Rating

Additional considerations

Final Rating

Source: Scope Ratings. * For non-capitalised institutions, the indicative rating from the 'Shareholder Support' assessment ranging from AAA - CCC is mapped non-linearly to the intrinsic strength assessment.

Intrinsic strength

Here, we assess the supranational's intrinsic strength on the basis of its institutional and financial profiles. We look at the importance of the institution's mandate and ESG factors, which include its governance structures, specifically its shareholder composition and concentration, reputational risks arising from activities that may contrast with its mandate, and its management of potential environmental risks. We assess the financial profile via three categories that capture distinct operational aspects: i) capitalisation, specifically the leverage ratio and the institution's ability to generate capital; ii) asset quality, including portfolio quality and asset performance; and iii) liquidity and funding, focusing on the liquidity coverage, funding needs and the extent to which an institution is perceived as a benchmark issuer. The overall intrinsic strength assessment is mapped to a seven-point scale, ranging from 'Excellent' to 'Very Weak'. We do not assess capitalisation for non-capitalised institutions. Details are provided in Section 2.

Shareholder support

In this part of the assessment, we analyse the strength of the supranational's key shareholders and their willingness and ability to provide support. We define key shareholders as those whose capital/ownership shares, starting with the largest shareholder, cumulatively comprise at least 75% of the supranational's capital. The average capital-weighted rating of key shareholders results in the indicative shareholder strength of the institution, which is then adjusted upwards in case of extraordinary support mechanisms, including highly rated callable capital or joint and several guarantees. For capitalised institutions, the overall shareholder support assessment is mapped to a four-point scale, ranging from 'Excellent' to 'Moderate', while for non-capitalised institutions the actual rating of the key shareholders ranging from AAA to CCC is the starting point of the credit analysis, reflecting the relative importance of this rating factor. Details are provided in Section 3.

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Indicative rating

In this step, we map the assessments for intrinsic strength and shareholder support to determine the indicative rating, which is usually a three-notch range. The mapping tables are distinct for capitalised and non-capitalised institutions, such that a greater (lower) weight is placed on an institution's intrinsic strength (shareholder support) for capitalised (non-capitalised) supranationals. Details are provided in Section 4.

Additional considerations

Additional considerations can be either credit positive, neutral or negative and are usually capped at one notch to determine the final rating. They allow us to consider rating relevant factors that may not be captured consistently in the scorecard, usually because they only apply under specific circumstances or only to a subset of entities. In addition, when material credit considerations are not yet captured in the scorecard, they allow us to inform our forward-looking assessment of the supranational. Details are provided in Section 5.

Our analysis is primarily based on institutions' governing documents, annual reports, financial statements, and investor relations presentations. In addition to quantitative metrics, the final rating depends on qualitative assessments and analytical judgement.

2. Intrinsic strength

We assess an institution's intrinsic strength based on its institutional and financial profiles. Under our approach, a strong intrinsic credit profile can result in a high rating assignment for capitalised institutions even with relatively weak shareholders. This reflects our view that supranationals are *de facto* safe assets that, depending on their intrinsic strength, can be rated above their respective sovereign shareholders, reflecting their status as being usually exempt from national taxation laws and immune from transfer and convertibility risks. At the same time, a weak intrinsic profile can lower the final rating assignment also for non-capitalised institutions.

Our assessment combines both quantitative and qualitative factors which together determine the intrinsic strength assessment. The institutional profile is assessed on a five-point scale ranging from 'Very Strong' to 'Very Weak' while the financial profile is assessed on a seven-point scale ranging from 'Excellent' to 'Very Weak'. For capitalised institutions, the financial profile assessments are refined to include a (+) (-) strength assessments for each of the categories. For details, please see the indicative rating section.

2.1 Institutional profile

We assess the credit risk of supranationals placing a significant emphasis on the importance of their mandate to their shareholders and associated environmental, social and governance (ESG) considerations. Supranationals are generally well-managed and set-up by their governments to support policies in the interest of their shareholders. Delivering on their mandates usually has a socially desirable and ESG-related outcome, as defined by their shareholders. Our assessment of social and environmental risks is thus directly linked to our assessment of the importance of the institution's mandate to its shareholders and capped at one notch positively or negatively. Governance related issues are assessed separately and can affect the final rating by one notch positively or negatively. The overall assessment of a supranational's institutional profile is thus limited to five categories per the below table.

Figure 2: Institutional profile assessment

	Institutional profile							
	Very Strong Strong Moderate Weak				Very Weak			
Total rating notches	+2	+1	0	-1	-2			

Source: Scope Ratings.

2.1.1 Importance of mandate

An increase (decrease) in the importance of the institution's mandate to its shareholders, or a change in the mandate itself, would be credit-positive (credit-negative). This could arise from political and economic developments. Here, we assess qualitatively i) the degree to which other public or private players can provide a substitute for the institution's main activities; ii) the growth in the number of shareholders as well as whether the institution is expanding the scope of its activities; iii) the extent to which shareholders agree to increase resources, including the retention of profits; and iv) whether the supranational extends significant amounts of grants and concessional loans that underpin its policy importance to its shareholders.

In general, an irreplaceable mandate and high strategic importance to shareholders and a resulting higher political commitment to providing support to ensure the institution's longevity, are credit positive and will be assessed as 'Very High'. Supranational entities

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whose activities can be partially fulfilled by other entities and/or entities with a more limited scope of activities, will be assessed as 'High'. Conversely, a declining importance of the supranational's mandate to its shareholders and/or a declining scope of activities will be assessed negatively and is capped at one notch.

Figure 3: Mandate, social and environmental factors

Criteria	Unit	Mandate,	Mandate, social and environmental factors			
Criteria	Offic	Strong	Weak			
Importance of mandate	Qualitative	Very High	High	Declining		
Social factors	Qualitative	Strong	Medium/ N/A	Weak		
Environmental factors	Qualitative	Strong	Medium/ N/A	Weak		
Rating notches		+1	0	-1		

Source: Scope Ratings. The assessment is capped at one notch overall. A 'Very High' importance of mandate will result in +1 rating notches so long as either social or environmental factors are assessed as 'Strong'. Further, a 'Very High' assessment of the importance of mandate will lead to 0 rating notches so long as social and environmental factors are not both assessed as 'Weak', in which case the overall assessment would result in -1 rating notches. A 'High' assessment of the importance of mandate will lead to no adjustment so long as social and environmental factors are not both assessed as 'Weak', in which case the overall assessment would result in -1 rating notches. If the importance of mandate is 'Declining', we adjust by -1 rating notches, regardless of the assessment for social and environmental factors.

2.1.1.1 Social factors

A supranational's ability to deliver on a socially desirable outcome strengthens its reputation, which is not only critical for investor confidence but also its strategic importance to its shareholders, underpinning the likelihood of receiving additional financial resources if ever needed. In this regard, social risks relate to employment rights, diversity and inclusion, child labour, human rights, and the health and safety of employees and communities. In general, we believe these issues are well addressed by supranationals. Still, in the case we identify a material social risk that contrasts with the institution's mandate, we would assess this factor as 'Weak'.

Conversely, as supranationals' mandates are to achieve socially desirable outcomes as defined by their shareholders and their governance structures, we will assess positively supranationals that contribute to social issues, for example, via lending to borrowers with limited or no access to other external sources of finance, extending concessional loans or grants or financing projects with a social impact. We will also view positively supranationals whose agency in pioneering practices for the financial industry, for example, new financial instruments, project selection criteria and reporting guidelines, fosters socially-desirable outcomes that are in line with the Sustainable Development Goals. Here, we will view positively evidence of a supranational's ability to mobilise private finance to facilitate private participation in sustainability projects. In this regard, we would also view ESG-related treasury holdings positively. Finally, social factors may be less relevant to some supranationals, with neither credit positive nor credit negative implications, which we would assess as 'Medium/ N/A'.

2.1.1.2 Environmental factors

Most supranationals interpret climate change mitigation and adaptation as being part of their mandates⁸. Generally, they aim to contribute to the Paris Agreement's objective to "make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development". Many supranationals assess projects according to ESG criteria, although criteria applied depend on the level of an institution's ambition and mandate, and seldom consider full alignment with the Paris Agreement.

Credit-relevant environmental risks include the risk of stranded assets as well as the reputational risk of pursuing activities, either directly or through counterparties, that are contradictory to the institution's mandate and environmental objectives. Specifically, we will negatively adjust the assessment if we deem the supranational's portfolio to be highly exposed to environmental risks that are not actively or effectively managed (**Figure 4**). We note that some institutions may be particularly exposed to geographies with heightened natural disaster risks or sectors subject to transition risks and thus asset-stranding¹⁰. We assess natural disaster and transition risks at the country level, focusing on the countries where most of the institution's activities take place. We calculate environmental risk using the transition and physical risk scores per our sovereign methodology for the sovereigns comprising the top 10 country exposures. The weights are determined by the share of private and public exposures of the mandate-driven exposures of those 10 countries.

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Joint Report on Multilateral Development Banks CLIMATE FINANCE 2020.

https://unfccc.int/sites/default/files/english_paris_agreement.pdf Article 2.

Caldecott, B., Howarth, N., and McSharry, P. (2013): Stranded Assets in Agriculture: Protecting Value from Environment-Related Risks.
Caldecott, B., and McDaniels. J. (2014a): Financial Dynamics of the Environment: Risks, Impacts, and Barriers to Resilience, Oxford. Stranded Generation Assets: Implications for European Capacity Mechanisms, Energy Markets and Climate Policy.



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Transition risks are more likely to be elevated for exposures to Eastern Europe, former Soviet states and the Middle East while physical risks are more likely to be material for exposures in Africa, the Caribbean and South East Asia¹¹. While environmental risks may vary meaningfully across companies even within narrowly defined sectors, the country-level estimate should still provide a useful indication of the potential risks in the countries of operation.

The second step of this analysis evaluates the extent to which the supranational is addressing its environmental exposures. This may include criteria for project and counterparty selection or management of treasury activities. For example, we will consider qualitatively whether a shadow price of carbon is a factor in project selection, or certain counterparties or treasury investments are excluded or favoured (e.g., best-in-class approach) to minimise risks of stranded assets or reputational risks. In addition, shorter lending maturities usually associated with private sector exposures would also be assessed as mitigating long-run transition-related risks. The existence of instruments to protect against environmental risks, such as insurance cover or sovereign guarantees, and a record of losses due to the materialisation of these risks are also relevant to our assessment.

Our evaluation of environmental factors will be positive to account for a supranational's agency in pioneering practices for the financial industry, for example, new financial instruments, project selection criteria and reporting guidelines, to foster environmentally-desirable outcomes in line with its mandate and/or the Paris Agreement. Here, we will view positively evidence of a supranational's ability to mobilise private finance to facilitate private participation in climate adaptation and mitigation projects as this would contribute meaningfully to a supranational's delivery on its mandate. In this regard, we would view ESG-related treasury holdings positively. Finally, environmental factors may be less relevant to some supranationals, with neither credit positive nor credit negative implications, which we would assess as 'Medium/ N/A'.

Figure 4: Environmental risks

Environmental risks			Physical and transition risks	
Environmental risks		Low	Medium	High
Risk mitigation	Weak			-1
policies	Strong			

NB. Physical and transition risks assessed via scores from Scope's sovereign rating methodology. Risk mitigation policies assessed qualitatively.

2.1.2 Governance

Governance is an import credit consideration common to all supranational ratings. Governance and risk management are generally strong among supranationals and therefore drive the uplift under our financial profile assessment. However, given its credit relevance, we also recognise a track record of good governance in our institutional profile assessment, with an upward adjustment of one notch. Conversely, we may adjust a credit profile downwards by up to one notch if we see governance is significantly weaker relative to peers, is deteriorating, is impeding the institution from pursuing its mandate, or does not meet self-imposed standards.

Risks include, but are not limited to i) weak governance structures, including the degree of board independence and effectiveness as well as the degree of political or external influence, reflecting the influence of certain members on decision-making boards, and ii) less compelling or weak strategies and internal controls, specifically an inability to formulate a vision and implement a strategy to ensure the predictability of activities, and/or reputational concerns arising from inadequate processes, linked to the lack of independent regulation and supervision of supranationals.

Governance structures

We assess possible governance-related risks by determining whether shareholders own or control a significant share of the supranational's capital and decision-making bodies, by quantitatively assessing shareholder concentration. While shareholders with a significant ownership of the institution may act as a positive force for its activities, a more concentrated ownership could also lead to i) certain shareholders exerting a disproportionate influence on the board, management and strategy of the supranational, which may cause it to conduct operations at the expense of prudent risk management practices; and ii) a supranational relying on only a few shareholders for additional support in cases of financial distress.

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¹¹ See Scope's research Environmental risks: assessing sovereign transition, physical and resource risks.



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We measure concentration based on the capital shares of all shareholders with the Herfindahl-Hirschman Index (HHI)¹². A low (high) value indicates a low (high) concentration. The higher (lower) the shareholder concentration, the more (less) likely it is that we negatively adjust the supranational's rating. In addition, to account for the risk of a single shareholder holding a controlling stake, for example, with a blocking majority in decision-making bodies, we make a negative adjustment when any shareholder owns more than 25% of a supranational. We may also, however, assign a negative notch on a qualitative basis, in case a single shareholder holds a blocking majority without a minimum 25% ownership. Conversely, we may also override a negative signal from shareholder concentration/control metrics in case of a track record of very strong governance that does not give rise to stated concerns.

Strategy and internal controls

We assess the risks of changing strategies and priorities by qualitatively evaluating any changes to the supranational's activities that give rise to inconsistent strategies, such as frequent changes in overall growth or eligibility criteria for financing and activities. Here, we assess qualitatively for any conflicts between borrowing and non-borrowing member states that could affect either the supranational's strategy and implementation of its mandate or the level of shareholder support. Disagreements between regional and non-regional member states¹³ could emerge, for example, over capital increases and the resulting changes in voting rights.

Finally, to account for the non-regulated nature of supranationals, we will evaluate the quality and frequency of financial reporting. We will review the governance, audit and risk management reports of the supranational to identify risks in terms of execution, delivery, process management, counterparties, products, business practices, fraud, system failure, employment practices and workplace safety. We note that supranationals generally manage this risk well as they produce detailed financial reports that are audited by recognised accounting firms. In case of concerns regarding the supranational's strategy or internal controls, including on capital adequacy if applicable, we will adjust the assessment negatively by one notch.

Figure 5: Governance

Criteria	l lmit		Governance				
Criteria	Unit	Strong	Medium	Weak			
Shareholder concentration	HHI		≤ 1,500	> 1,500			
Shareholder control	%		≤ 25	> 25			
Strategy and internal controls	Qualitative	Strong	Medium	Weak			
Rating notches		+1	0	-1			

NB. We will deduct the notch in case one of the metrics is assessed as 'Weak'. A 'Strong' assessment on strategy and internal controls can override potential negative signals from shareholder concentration and control. HHI rounded to nearest 100. Shareholder control rounded to full number.

Source: Scope Ratings.

2.2 Financial Profile

Under this part of the analysis, we assess an institution's financial profile¹⁴ along three categories that capture distinct operational aspects: i) capitalisation, which we will not assess for non-capitalised institutions, ranges from a positive six to negative three notch assessment; ii) asset quality, which can increase (decrease) the assessment by five (three) notches; and iii) liquidity and funding, which can increase (decrease) the assessment by eight (four) notches. We sum the total amount of assigned notches to determine the supranational's financial profile in line with the below table. For capitalised institutions, these three-notch ranges are further refined such that the top (bottom) of each range is classified with a (+) (-) strength assessment.

Figure 6: Financial profile assessment

	Financial profile							
	Excellent	Very Strong	Strong	Adequate	Moderate	Weak	Very Weak	
Total rating notches	≥ +14	< 14; ≥ +11	< 11; ≥ +8	< 8; ≥ +5	< 5; ≥ +2	< 2; ≥ -1	< -1	

Source: Scope Ratings.

2.2.1 Capitalisation

The first pillar of our financial profile assessment focuses on capital adequacy. Our assessment aims to reflect a supranational's capacity to absorb losses taking into account the long-term and counter-cyclical nature of supranational operations. The leverage

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¹² The HHI is a common concentration measure, whereby the squares of the capital shares of the individual shareholders are summed and then multiplied by 10,000. The HHI gives a proportionately greater weight to the shares of the larger shareholders.

Non-borrowing shareholders provide the institution with capital that can be leveraged and directed towards projects as per the institution's mandate and financial capacity. Non-borrowing countries thus leverage their resources, gaining knowledge and policy insights and diversify their own risks.

¹⁴ Unless stated otherwise, we calculate a three-year weighted average for the variables in this part of the assessment, assigning T-1 60%, T-2 30% and T-3 10%.



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ratio is the cornerstone of this assessment given its simplicity, ensuring consistency and comparability across almost all supranationals, as well as evidence that, despite its risk-insensitivity, it is a reliable indicator of potential capitalisation problems for financial institutions¹⁵. We review a supranational's *implied* leverage ratio, which assumes that it operates at maximum leverage as per its statutes or credibly enforced operating guidelines. This approach reflects a supranational's capacity to absorb losses as per its mandate and as established by its shareholders.

The ratio's numerator aggregates the supranational's equity, comprising paid-in capital, accumulated reserves and retained profits¹⁶. The denominator refers to the supranational's *potential* mandated assets, retrieved from legal documents or credibly enforced operating guidelines¹⁷. Usually, operations are constrained by the size of unimpaired subscribed capital, reserves and surpluses, with a few institutions allowing for greater leverage. The higher (lower) the capitalisation, the higher (lower) our assessment. Our approach penalises a supranational whose capitalisation falls below the 7.5% threshold, as this may signal the potential for heightened leverage even though operations continue as mandated. To reflect the fact that some supranationals operate significantly more conservatively compared to their statutes or guidelines, we will adjust upwards this assessment by one notch to account for the actual leverage of the supranational provided it is equal to or above 30%.

Although most supranationals do not aim to maximise profits, a minimum earnings capacity is preferable, and helpful in generating internal capital buffers to weather sustained periods of distress through the cycle. Conversely, sustained periods of losses will lead to lower capitalisation. Our assessment of this driver is capped at one notch due to our mandate-driven approach. We use return on equity, accounting for capital depletion (if any), after dividends paid and transfers to concessional arms, to measure retention of capital. A three-year average above 3%, results in a positive adjustment; below 0% is negative for the rating.

Finally, to complement our quantitative assessment, we provide a qualitative adjustment to reflect our expectations of the capitalisation trends on a forward-looking basis and/or any other factors that our scorecard does not capture that may affect our capitalisation assessment, including capital increases. This can be positive, negative or neutral, and is capped at 1-notch.

Figure 7: Capitalisation

Criteria	Unit				Capitalisatio	on		
Citteria	Oilit		Very High	High	Adequate	Moderate	Low	Very Low
Capital*/ Potential assets	%	> 30	< 30; ≥ 20	< 20; ≥ 15	< 15; ≥ 10	< 10; ≥ 7.5	< 7.5; ≥ 5	< 5
Capital*/ Actual assets	%				≥ 30			
Profitability (return on equity)	%				≥ 3	< 3; ≥ 0	< 0	
Rating notches		+4	+3	+2	+1	0	-1	-2

^{*}Defined as paid-in capital, reserves and retained profit. Weighted three-year average; all rounded to full number. Source: Scope Ratings.

2.2.2 Asset quality

Asset quality is critical to our credit ratings on supranationals. We acknowledge that supranationals' mandates compel them to increase their exposure to certain countries or sectors in times of stress, weakening their asset quality. Even so, an unexpected deterioration in their asset quality could lead to losses that erode reserves, thus negatively affecting our capitalisation assessment. In addition, risks from mandated activities vary: direct lending to sovereigns and public sector entities is usually less risky than direct lending to private sector entities, or direct investments in company equity.

It is thus critical to assess a supranational's expected risks as certain activities, geographies and sectors are riskier and more volatile. Accordingly, this methodology attributes a large weight to asset quality, which is structured around a forward-looking qualitative assessment of the portfolio's quality and a quantitative assessment of the portfolio's past performance. Together, these assessments can affect the financial profile assessment by up to five (three) notches positively (negatively).

2.2.2.1 Portfolio quality

Our assessment of the supranational's portfolio quality relates to its mandated activities, and is based on i) the materiality of certain exposure types, usually loans to sovereigns and the private sector, and guarantees, depending on the size of the exposure relative to the supranational's total assets; ii) the average borrower credit quality; iii) a qualitative assessment of potential protections that

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¹⁵ See for instance: Sun (2011) and the IMF (2009), who show that the leverage ratio is one of the most reliable predictors for public bail-outs of financial institutions. Haldane and Madouros (2012) and Acharya, Engle, and Pierret (2014) show that the leverage ratio outperforms the predictive power of risk-weighted assets.

We will assess the capital benefit of hybrid instruments on a case-by-case basis.

¹⁷ In case of multiple guidelines that may give rise to different maximum assets, we will use the stricter of the two limits.



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may reduce the ultimate credit risk borne by the supranational; and iv) concentration risks. The overall portfolio quality will thus be determined by the relative size of each exposure category, the average borrower quality, the quality of credit enhancements and level of diversification, which together can affect the financial profile assessment by up to two notches positively or negatively. The starting point of our analysis is the weighted average borrower quality of the entire portfolio, which we assess on a five-point scale ranging from 'aaa/aa' to 'b/ccc', which is mapped to the below table.

Figure 8a: Portfolio quality

Criterion			Portfolio quality		
Citterion	Very Strong	Strong	Adequate	Moderate	Weak
Avg. borrower quality	aaa/aa	а	bbb	bb	b/ccc
Total rating notches	+2	+1	0	-1	-2

Source: Scope Ratings. Based on latest data.

This initial assessment can then be adjusted upwards to account for the benefits of preferred creditor status for sovereign exposures, credit protection on private sector exposures as well as widely diversified portfolios across geographies, sectors and individual counterparties. Conversely, the assessment can be adjusted downwards to account for heightened risks from elevated equity exposures. The below table provides *indicative* guidelines for our adjustments that inform our final assessment of the supranational's portfolio quality. The adjustments for credit protection and diversification sum to a maximum of 10 points, while equity exposures can decrease the score by up to three points. Three points are usually equivalent to one category on our five-point scale assessing a supranational's portfolio quality. Finally, we note that our forward-looking assessment of the supranational's portfolio quality may override the scorecard-driven adjustments. Such deviation, if applicable, will be clearly communicated and is limited to one, and only in exceptional cases to two, category assessments. A stylised example is provided in Annex VI.

Figure 8b: Adjustments to assess portfolio quality

Adj	ustments	Indicator	Assessment/ Thresholds									
Credit Protection	Sovereign PCS Private sector secured	% of loan portfolio	100	≥ 80	≥ 60	≥ 40	≥ 20	< 20				
	Geography	HHI	***************************************	•	••••••	≤ 1000	≤ 2000	> 2000			•••••	
Diversification	Sector	HHI					≤ 2000	> 2000				
	Top 10 exposures	% of loan portfolio				≤ 25	≤ 75					
Equity Exposure		% of equity						≤ 25	> 25	> 50	> 75	
Points			+5	+4	+3	+2	+1	0	-1	-2	-3	

The adjustments for credit protection depend on the share of the portfolio and are thus overall limited to five points. HHI = Herfindahl-Hirschman index; latest data. Source: Scope Ratings.

Portfolios with 'Very Strong' asset quality and/or protection will receive a two notch uplift. Such portfolios have an estimated borrower quality of 'aaa/aa' and/or are usually characterised by either i) significant exposures to sovereigns with a high likelihood of benefiting from PCS; ii) mostly protected exposures to the private sector resulting in an overall low credit risk assessment; iii) very small to no equity exposures; and iv) widely diversified exposures across individual positions, geographies and/or sectors. Conversely, highly concentrated and unprotected portfolios of non-investment grade borrower quality and/or portfolios with high equity exposures will be assessed as 'Moderate' or 'Weak', resulting in a negative adjustment of up to two-notches to the supranational's financial profile.

Sovereign and public sector exposures

To assess the risk of exposures to sovereigns and public sector entities, we use the credit ratings¹⁸ of the sovereigns comprising the top 10 country exposures in the lending book. We determine the weight based on the exposures as a share of the total sovereign exposures of those 10 countries¹⁹. For public sector exposures we adjust the sovereign rating downwards, usually by one but not more than two rating notches, as a conservative proxy of the borrower quality when this cannot be directly estimated. A borrower with high (low) average quality or investment (non-investment) grade quality indicates a relative safe (risky) sovereign exposure.

Sovereigns generally grant supranationals **preferred creditor status**. This is because of the supranationals' mandates, attractive financial terms, counter-cyclical nature of operations and representation of borrowers. PCS is a market practice whereby distressed

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¹⁸ In case we do not publicly rate the sovereign, we will use either private ratings orcredit estimates.

If the top 10 country exposures do not constitute 50% of the total sovereign exposures, we may expand this assessment to the top 20 country exposures.



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sovereign governments service their obligations to some lenders while potentially defaulting on others. This practice effectively increases the seniority of supranational claims. While PCS has no legal or regulatory basis, it constitutes a market practice attributable to the incentives faced by distressed sovereign borrowers.

Despite the absence of an explicit, contractual seniority, there is evidence of an implicit seniority: the International Monetary Fund and multilateral creditors customarily rank first, ahead of government bond holders, bilateral government-to-government creditors, commercial banks and trade creditors²⁰. Thus, PCS reflects the desire among defaulting sovereigns to maintain relations with multilateral institutions that continue to lend when private sector funding dries up. As supranationals play such a role, they are likely to benefit from PCS²¹. In this context, we assess the likelihood of the supranational benefiting from PCS based on previous exemptions from debt restructurings as well as transfer and convertibility risks on its loan portfolio. If that is the case, we will usually assume that all sovereign exposures benefit from PCS. A portfolio consisting of sovereign loans only that benefit from PCS would therefore be assessed as fully protected – a benefit we will usually account for with a final portfolio quality assessment that is two categories above the initial one (the latter which is based on the average borrower quality only).

Finally, while PCS is clearly credit positive for supranationals, the practice of deferring and reprofiling loans to distressed sovereigns that are unable to honour their obligations in line with the original loan agreement is negative for the supranational as it implies a later repayment than originally foreseen, even if no impairment is recorded. In such circumstances, we may make a negative adjustment to our portfolio quality assessment.

Non-sovereign exposures

Our assessment of the risk of a supranational's non-sovereign exposures starts with an evaluation of the average borrower quality. This credit quality estimate is usually based on a rating committee's assessment of the average credit risk of the portfolio. This estimate is usually based on i) information provided by the supranational on that portion of the portfolio, including internal loan-grading systems and self-reported risk-based capital metrics, and/or ii) the credit ratings of the sovereigns comprising the top 10 country exposures in the lending book, adjusted downwards usually by three (and no more than six) rating notches, which thus serves as a conservative proxy for the private sector borrower quality when this cannot be directly estimated.

Contrary to sovereign exposures, the benefits from PCS for private sector exposures are limited to the exemption from moratoria and exchange controls. However, supranational institutions can enhance or secure protection on this part of their portfolio, for example, via explicit guarantees, risk sharing structures, letters of comfort, collateral, pledges of accounts or shares, movable and immovable assets and inventory. In such cases, if applicable, our assessment will account for i) the size and credit quality of the assets for which the risk is reduced/ transferred, and/or ii) the ultimate guarantor to assess the extent to which credit enhancements lessen the risk surrounding the supranational's assets. Portfolio exposures secured by sovereign guarantees or highly rated guarantors (usually rated AA- and above) and credit enhancements that meaningfully reduce the portfolio risk can significantly improve our initial assessment of the supranational's portfolio quality. In such cases, we will assess a fully protected portfolio two categories above our initial portfolio quality assessment (the latter which is based on the average borrower quality only).

Equity investments

A supranational mandate that either explicitly prohibits or significantly limits equity investments is positive for our assessment of portfolio protection. This is because investing in the equity of private entities is riskier than providing loans, due to not only the inherent risk of bankruptcy but also the volatility of share values. We assess the materiality of these exposures in terms of total available own funds (usually, paid-in capital and reserves) in line with **Figure 8b**, and compare the ratios to the peer group. Realised and unrealised gains and losses can also inform on the institution's track record and risk appetite, supporting our potential negative adjustment – which is limited to one category assessment – to our portfolio quality assessment.

Guarantees and other exposures

In instances where guarantees or other exposures constitute a meaningful share of the total mandated exposure of the supranational, usually above 10% of total mandated assets, we will estimate the borrower quality in line with our assessments for either sovereign and public sector exposures or private sector exposures, depending on the underlying risk exposure. The risk of the guarantee being called, however, will be assessed as highlighted under the adjustments in the liquidity and funding pillar.

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²⁰ Schlegl, M., Trebesch, C., and Wright, M. (2015), Sovereign debt repayments: Evidence on seniority, VOX CEPR.

²¹ In 1988, the IMF's board of governors' interim committee "urged all members within the limits of their laws to treat the Fund as a preferred creditor".



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Portfolio diversification

Loan portfolios of supranationals engaging predominantly with the public sector are usually concentrated. Conversely, the portfolios of supranationals lending directly to the private sector are usually more diversified. All else equal, highly concentrated portfolios are riskier. We assess a supranational's portfolio diversification by geographies and sectors using the Herfindahl-Hirschman Index, as well as by the share of the top 10 exposures. We also look at additional factors determining the level of concentration, such as Exposure Exchange Agreements²². Exposures that are highly diversified will positively affect our portfolio quality assessment. Here, the potential positive adjustment to our final assessment is capped at up to two assessment categories.

2.2.2.2 Asset performance

We assess the non-performing loan (NPL) ratio over the past three years, calculated by standardising the numerator to loans with interest or principal payments overdue by more than 90 days. A low (high) NPL ratio reflects a supranational's low (high) risk project selection and effective (ineffective) risk management and monitoring practices and is thus assessed positively (negatively). The NPL ratio is a good measure as it is i) readily available for all supranationals; and ii) tests the supranational's actual benefit from its portfolio protection. We usually complement this indicator with an analysis of the provisioning level as well as the volume of NPLs in relation to the entity's capital, if applicable. Overall, this part of the assessment can affect the rating by up to three (one) notches positively (negatively).

Figure 9: Asset performance

Criterion	Unit	Asset performance								
Criterion	Unit	Excellent	Very Strong	Strong	Adequate	Weak				
NPLs	% total loans	≤ 0.5	> 0.5; ≤ 1	> 1; ≤ 3	> 3; ≤ 5	> 5				
Ratin	ig notches	+3	+2	+1	0	-1				

Weighted three-year average rounded to one decimal. Source: Scope Ratings.

Finally, to complement our quantitative assessment, we provide a qualitative adjustment to reflect our expectations of the asset performance trends on a forward-looking basis. This can be positive, negative or neutral, and is capped at 1-notch.

2.2.3 Liquidity and funding

Liquidity and funding are the primary drivers of this assessment pillar. In case of a shock, a supranational's liquidity buffers and access to funding sources ensure its ability to continue financing operations and honouring outstanding obligations before tapping its own resources – provisions, reserves and paid-in capital – and/or resorting to shareholders for extraordinary support. This reflects the fact that most supranationals do not have access to the deposits and liquidity facilities that central banks provide to commercial banks. Taken together, liquidity and funding can affect the financial profile assessment by up to eight (four) notches positively (negatively).

2.2.3.1 Liquidity

Driven by their mandates, supranationals need large pools of liquidity to maintain high lending volumes. This is particularly the case for entities with continuous disbursements or that lend counter-cyclically and during periods of liquidity stress. We thus focus on whether the supranational has enough liquid assets to meet financial obligations (including cash flow obligations) to honour promised disbursements for ordinary operations over an extended period.

The key quantitative criterion is:

The liquid assets ratio

The liquid assets ratio assesses the supranational's survivability period, that is, the period over which a supranational can honour debt repayments and operate without access to financial markets. We use the actual liquidity coverage instead of internal guidelines or policies because supranationals tend to act much more conservatively than their guidelines and policies allow. The numerator of the ratio includes liquid assets, defined as readily available cash and cash equivalents and all assets available within 12 months, including committed, undrawn and unconditional credit lines from supranational counterparties²³ rated AA- or higher. We exclude expected cash inflows from lending operations as these may be unavailable for covering own obligations and disbursements during

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²² Under an Exposure Exchange Agreements, a supranational swaps a portfolio of assets against another supranational's portfolio of assets of the same credit quality but with different exposures, thus diversifying its underlying risks.

For this assessment, we would also include credit lines provided by highly-rated national development banks.



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times of stress. The denominator includes all liabilities maturing within one year as well as expected annual gross disbursements in the following year in line, in with the supranational's mandate. We include the latter, conservatively, as supranationals are mandated to continue activities precisely when economic and financial circumstances deteriorate. When we cannot estimate future disbursements, including via credibly announced future disbursement plans, we use past annual disbursement amounts as a proxy.

We assess a high (low) liquid assets ratio positively (negatively). For instance, a ratio of above 100% indicates that a supranational's liquidity buffers can, on average, cover all outstanding liabilities and committed disbursements in any given year without resorting to capital markets. Conversely, a ratio of below 10% indicates liquidity buffers are insufficient to cover even about a month of outstanding liabilities and disbursements without resorting to capital markets. Our assessment penalises especially a supranational whose liquidity buffers fall below this 10% threshold. Our conservative assessment reflects our view that a minimum liquid assets coverage is necessary for supranational creditworthiness. Exceptional buffers can result in an uplift of up to four notches.

Figure 10: Liquidity

Criterion	l lni4	Liquidity								
	Unit	Excellent	Very Strong	Strong	Adequate	Moderate	Weak	Very Weak		
Liquid assets ratio	%	> 100	≤ 100; > 75	≤ 75; > 50	≤ 50; > 25	≤ 25; > 15	≤ 15; > 10	≤ 10		
Rating notches		+4	+3	+2	+1	0	-1	-2		

Coverage ratio corresponds to approximate survivability period (in months): 100% (12); 75% (9); 50% (6); 25% (3); 15% (2); 10% (1). Weighted three-year average rounded to nearest fifth. Source: Scope Ratings.

2.2.3.2 Funding

Even during times of economic and financial distress, the supranational's creditworthiness allows it to benefit from the 'flight to quality', ensuring sustained access to capital markets and enabling it to honour financial obligations and fulfil its mandate. In our assessment, this favourable funding status, ultimately conferred by the market, depends on factors such as the extent to which the supranational is an active issuer across several maturities, currencies and jurisdictions. This status is more likely for a benchmark issuer that issues high volumes across diverse currencies, geographies and investor types. A strong funding position may thus compensate for a comparatively 'weaker' liquidity coverage, as in such cases liquidity may even be the less economical option.

The key quantitative criteria are:

- Maturity gap
- Annual funding volume
- > Funding currency diversification

In our view, the higher (lower) the coverage of longer-term liabilities by longer-term assets, the lower (higher) the refinancing and maturity mismatch risk. A significant, structural maturity mismatch between assets and liabilities with a maturity from one to five years²⁴, for example, with available assets not covering half the expected liabilities coming due, can signal funding risks or a heightened reliance on capital markets. This is important because supranationals typically offer long-term financing and fund their activities through capital markets and/or credit lines from other supranationals.

Figure 11: Funding

Criteria	Unit	Funding							
Criteria	Onit	Very Strong	Strong	Adequate	Weak				
Maturity gap	Multiple		≥ 0.75	< 0.75; ≥ 0.5	< 0.5				
Funding volume	EUR/ USD bn	≥ 25	< 25; ≥ 5	< 5; ≥ 2	< 2				
Funding currency	Top one share (%)		≤ 70	> 70					
Rat	ng notches	+2	+1	0	-1				

NB. Weighted three-year average rounded to nearest fifth for the maturity gap (in %) and to a full number for funding volume and funding currency. Source: Scope Ratings.

In addition, the higher (lower) the annual funding volume and the lower (higher) the dependence on one main funding currency, the greater (lower) the presence and acceptance of the institution as a global benchmark issuer. We assess a supranational's funding currency diversification positively (negatively), the lower (higher) the share of the main funding currency relative to total issued debt.

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²⁴ Data over this time horizon are usually publicly available. In case they are not, we will use the longest available time period. See VII Glossary for the calculation.



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The assessment for the maturity gap is worth one notch, either positively or negatively, the assessment of the annual funding volume can affect the assessment positively (negatively) by up to two (one) notches, while the assessment for funding currency diversification can only lead to a positive one-notch adjustment.

2.2.3.3 Adjustments

To complement our quantitative assessment, we provide a qualitative adjustment to reflect our expectations of the liquidity and funding trends on a forward-looking basis. In addition, we also evaluate qualitatively whether there are any risks or specific strengths that could affect the liquidity profile of the supranational. These adjustments can affect the rating positively or negatively by one notch. Typically, these considerations include:

Access to reserve currency facilities

We will adjust the rating by one notch upwards if a central bank issuing a reserve currency grants the institution access to its liquidity facilities²⁵.

Contingent liabilities and guarantees

Supranationals use guarantees to pursue their mandates, which may drain funds during periods of stress and thus increase liquidity risk. Here, we assess guarantees and contingent liabilities relative to liquid assets as defined above. If these are significant, for instance, above 15% of liquid assets, and the guarantees are likely to be drawn upon, we could make a negative adjustment.

Investor base & ESG funding

Most supranationals have widely diversified investor bases across geographies and investor types. In addition, many supranationals are increasing their ESG-related funding activities, mapping some of their disbursements to the stricter eligibility criteria of evolving green, social or sustainability bond frameworks, demonstrating their ability to tap the growing ESG investor community which tends to have a long-term investment horizon, helping to lower funding costs, also during distressed times. In this context, we may make a positive (negative) adjustment in case of an exceptionally diversified (concentrated) and stable (unstable) investor base.

Other risks

Risks related to changes in interest rates, foreign currencies, derivatives and collateral are generally well managed by supranationals, reflecting their strong governance and risk management practices. In case we identify a material risk or deviations from industry best practices in the institution's risk management, this could result in a negative one notch adjustment. Finally, we could also make a negative adjustment for pre-dominantly wholesale-funded institutions in case of sustained periods without capital market funding activities.

3. Shareholder support

Our assessment places an important weight on the ability and willingness of supranational shareholders to provide timely financial support, such as emergency loans or pre-cautionary capital increases. Highly rated shareholders signal to the market that the supranational's mission and activities are supported by governments with i) the strongest legal and governance frameworks; and ii) favourable access to deep and liquid capital markets. The supranational's debt securities are thus likely to benefit from an institutional framework that ensures liquidity and market acceptance, for instance, via preferential regulatory treatment, eligibility for central bank operations, and listings on recognised exchanges.

In case of weakening credit metrics, the supranational's ability to honour its obligations will benefit from its shareholders' ability and willingness to provide additional financial resources. The track record of general capital increases among supranationals to preserve or even increase their mandated activities and maintain strong credit metrics (see Annex III) shows that highly-rated shareholders with a strong political commitment to the institution provide a strong form of investor assurance, given their inherent financial capacity to provide additional financial resources in case of need. The track record of capital increases, and the absence of any capital call to date, further highlight the preference of shareholders to provide capital increases over honouring (emergency) capital calls. This is because capital increases simultaneously enhance the supranational's creditworthiness and lending capacity²⁶.

Under our approach, strong shareholder support, based on highly-rated shareholders, is a sufficient condition for a high rating assessment for non-capitalised institutions whereas capitalised institutions can receive significant rating uplift to their intrinsic strength assessment to determine the final rating. For non-capitalised institutions, shareholder support is the starting point of the

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²⁵ Currency is included in the IMF's basket to value its Special Drawing Rights.

²⁶ A capital call would be a one-off budgetary outlay as the transferred funds would be used to honour a commitment of the supranational vis-à-vis an investor.



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credit analysis, whereby we derive an indicative rating through a quantitative assessment of the supranational's key shareholders or members. In contrast, for capitalised institutions the key shareholder rating is mapped to a four-notch scale. The initial estimate of the key shareholder rating is adjusted downwards by one notch in case of a meaningful overlap between the key shareholders providing support and the countries of operation. Extraordinary support measures can increase our assessment by two notches.

Figure 12: Overview of Scope's shareholder support assessment

Shareholder support	Non-capitalised	Capita	alised
Adj. key shareholder rating	AAA to CCC	0; -	+3
Extraordinary support	0; +2	0; -	+2
		≥ 3	Excellent
Assessment	AAA to CCC	2	Very High
Assessment	AAA 10 CCC	1	High
		0	Moderate

Source: Scope Ratings.

3.1 Shareholder strength

We assess the strength of shareholders by first looking at the weighted average rating of the key shareholders of the institution, and second, adjusting this rating by one notch downwards in cases in which we observe a significant overlap between the key shareholders and the countries of operation of the supranational. We use this adjusted key shareholder rating as our key variable to measure a supranational's shareholder support. Our assessment distinguishes between capitalised and non-capitalised institutions. While the adjusted key shareholder rating is taken at face value for the assessment of non-capitalised institutions, it is mapped to a four-notch scale for capitalised institutions in line with the below table.

Figure 13: Key shareholder rating

Adj. key shareholder rating	AAA	AA+	AA	AA-	A+	Α	Α-	BBB+	ввв	BBB-	BB+	ВВ	BB-	B+	В	В-	ссс
Assessment: non-capitalised	AAA	AA+	AA	AA-	A+	Α	A-	BBB+	BBB	BBB-	BB+	ВВ	BB-	B+	В	B-	CCC
Assessment: capitalised		+	-3			+2			+1					0			

Source: Scope Ratings.

3.1.1 Key shareholder rating

Key shareholders usually include governments that influence and determine the supranational's legal and organisational set-up and are therefore more likely to support the institution's capacity to fund its obligations. When an institution has exhausted its buffers and reserves and is considering a capital call, the provision of additional forms of support, including emergency loans or a capital increase, will depend on key shareholders and their financial abilities, reputational considerations and political commitment to the institution. In our view, the reputational risk associated with a possible default of a supranational is a high priority for the key shareholders that established the institution²⁷. Supranationals are typically run by their own management, staffed by international civil servants, and supervised by both a board of governors and a board of directors. The board of governors has the highest decision-making authority and consists of representatives of each member country, usually a minister of finance or central bank governor/president. Decisions are reached through a vote in which each country's voting share is usually weighted based on its cumulative financial contribution to the supranational.

Most supranationals allow a qualified majority to make decisions, rather than unanimity, with a blocking minority often needing more than 15%-25% of outstanding votes. This is why we define key shareholders as those whose cumulative capital share, starting with the largest shareholder, comprises at least 75% of the supranational's capital. We use the average capital-weighted rating of key shareholders to indicate the overall strength of an institution's shareholders²⁸. This reflects the fact that each shareholder's commitment is limited to its pro-rata ownership. For non-capitalised institutions, we will determine the key shareholder rating on the basis of variables that proxy – as best as possible – the relative relevance of shareholders or members. Variables include voting rights, guarantees, budgetary contributions or annual pledges, nominal GDP and/or the population size or similar factors.

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²⁷ Although supranationals have neither defaulted in the past nor called for additional capital, there have been situations of pre-cautionary capital increases.

We rely on private ratings or credit estimates in case key shareholders are not publicly rated. If information is limited, we assume credit quality is CCC.



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3.1.1.1 Adjustment

While it is our assumption that the key shareholders will in almost all cases be willing to provide support and additional financial resources if needed, the need to call for such support can reasonably be expected to occur only in instances in which material credit deteriorations in the portfolio of the institution arise. For this reason, to account for the risk that the key shareholders' ability is exaggerated by their weighted average rating, we make a negative adjustment of one notch in the case of a significant overlap between the key shareholders rated below AA- and the supranational's countries of operation in line with the below table. We do not include key shareholders rated AA- or above for this assessment, as the credit quality of such highly-rated shareholders is unlikely to deteriorate significantly even during financially distressed times.

Figure 14: Overlap key shareholders & countries of operation

Criterion	Unit	Overlap between key shareholders rated < AA- & countries of operation			
		Low	Medium/ High		
Share of portfolio related to key shareholders rated < AA-	%	≤ 50%	> 50%		
Adjustment to key shareholder rating		0	-1		

Source: Scope Ratings. Rounded to full number.

3.1.2 Extraordinary support

We will make a positive adjustment of up to two notches to account for the credibility of an institution's callable capital and/or additional mechanisms that materially strengthen the credit profile of the institution. Specifically, the higher (lower) the coverage of high-quality callable capital of actual mandated assets (see capitalisation), which we define as the callable capital of shareholders rated AA- or above, a threshold signifying exceptional or very strong credit quality²⁹, the more (less) likely supranationals are able to rely on their shareholders for extraordinary support.

For most supranationals, callable capital accounts for most of the shareholder capital and constitutes an obligation of shareholder governments to provide capital in clearly defined circumstances. However, no capital calls have been made to date³⁰. Also, no international rules or sanctions oblige a sovereign to comply with a call and, even then, such compliance may still require budgetary approval from a national parliament³¹. As a result, we account only for the callable capital of highly rated shareholders. We believe calls made by governments for an institution that they established would be honoured in full and on time, reflecting those governments' strong governance, reputational risks of not honouring a capital call, and inherent ability to pay. In exceptional cases, where high-quality callable capital covers 100% of mandated assets, we will make a positive adjustment of up to two notches.

Similarly, for non-capitalised supranationals, we assess additional mechanisms that could enhance their creditworthiness like explicit guarantees or guaranteed transfers by highly rated shareholders. Such credit enhancements provide investor assurance, as a call not honoured by a government is a reputational concern that casts doubt over the value of its other guarantees. Similarly, we assess the strength of capital call mechanisms by qualitatively evaluating the type of commitment, its rules and procedures, and potential time to execution. Capital call mechanisms that benefit from joint and several support are generally stronger than extraordinary support granted on a pro-rata basis, e.g. shareholders that pledge to compensate the supranational beyond their prorata share because other member countries are unable or unwilling to honour their commitments. Here, we also capture additional support mechanisms that meaningfully strengthen the institutional setup of the supranational, for example, via extraordinary flexibility to postpone significant volumes of scheduled disbursements to mobilise additional resources to cover annual bond repayments and/or debt payment priorities. Our assessment of extraordinary support mechanisms is capped at two notches for non-capitalised institutions, whereby each assigned notch will be clearly identified and communicated if applicable.

Figure 15: Extraordinary support

Criteria	Unit		Extraordinary support	
Citteria	Onit	Very Strong	Strong	Adequate
Callable capital [rating ≥ AA-] / Actual assets*	%	≥ 100%	< 100; ≥ 20%	< 20%
Additional support mechanisms	Qualitative	Very Strong	Strong	_
Rating notches		+2	+1	0

Source: Scope Ratings. Rounded to full number. ${}^\star\!$ Applies to capitalised institutions only.

See also Humphrey (2017) with a proposal to strengthen the credibility of callable capital.

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²⁹ A rating of AA- is used by the BIS to determine the lowest risk-weights for several assets. The ECB uses this threshold under its collateral policy.

³⁰ As there has never a capital call, there is uncertainty about whether shareholders would meet their obligations should a supranational make a capital call.



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4. Indicative rating

Here, we first map the assessments for the institutional and financial profiles to determine the supranational's intrinsic strength. In a second step, this assessment is mapped against the shareholder support to determine the indicative rating, which is usually a three-notch range. The mapping tables are distinct for capitalised and non-capitalised institutions, such that a greater (lower) weight is placed on an institution's intrinsic strength (shareholder support) for capitalised (non-capitalised) supranationals.

4.1 Capitalised institutions

Figure 16a: Mapping institutional and financial profiles for capitalised institutions

				Institutional Profi	le	
Int	trinsic Strength	Very Strong	Strong	Moderate	Weak	Very Weak
	Excellent	Excellent	Excellent	Excellent	Very Strong (+)	Very Strong
	Very Strong (+)	Excellent	Excellent	Very Strong (+)	Very Strong	Very Strong (-)
	Very Strong	Excellent Very Strong (+)		Very Strong	Very Strong (-)	Strong (+)
	Very Strong (-)	Very Strong (+)	Very Strong	Very Strong (-)	Strong (+)	Strong
	Strong (+)	Very Strong	Very Strong (-)	Strong (+)	Strong	Strong (-)
	Strong	Very Strong (-)	Strong (+)	Strong	Strong (-)	Adequate (+)
	Strong (-)	Strong (+)	Strong	Strong (-)	Adequate (+)	Adequate
file	Adequate (+)	Strong	Strong (-)	Adequate (+)	Adequate	Adequate (-)
Financial Profile	Adequate	Strong (-)	Strong (-) Adequate (+)		Adequate (-)	Moderate (+)
<u>ia</u>	Adequate (-)	Adequate (+)	Adequate	Adequate (-)	Moderate (+)	Moderate
anc	Moderate (+)	Adequate	Adequate (-)	Moderate (+)	Moderate	Moderate (-)
Ë	Moderate	Adequate (-)	Moderate (+)	Moderate	Moderate (-)	Weak (+)
_	Moderate (-)	Moderate (+)	Moderate	Moderate (-)	Weak (+)	Weak
	Weak (+)	Moderate	Moderate (-)	Weak (+)	Weak	Weak (-)
	Weak	Moderate (-)	Weak (+)	Weak	Weak (-)	Very Weak (+)
	Weak (-)	Weak (+)	Weak	Weak (-)	Very Weak (+)	Very Weak
	Very Weak (+)	Weak	Weak (-)	Very Weak (+)	Very Weak	Very Weak (-)
	Very Weak	Weak (-)	Very Weak (+)	Very Weak	Very Weak (-)	Very Weak (-)
	Very Weak (-)	Very Weak (+)	Very Weak	Very Weak (-)	Very Weak (-)	Very Weak (-)

Figure 16b: Mapping intrinsic strength and shareholder support for capitalised institutions

	Indiantica Dation	_		Shareholde	er Support		
	Indicative Rating	l	Excellent	Very High	High	Moderate	
	Excellent		AAA	AAA	AAA / AA	AA+ / AA-	
	+	 	AAA	AAA / AA	AA+ / AA-	AA / A+	
	Very Strong		AAA / AA	AA+ / AA-	AA / A+	AA-/A	
	-		AA+ / AA-	AA / A+	AA- / A	A+ / A-	
	+	F	AA / A+	AA- / A	A+ / A-	A / BBB+	
	Strong		AA- / A	A+ / A-	A / BBB+	A- / BBB	
5	-		A+ / A-	A / BBB+	A-/BBB	BBB+ / BBB-	
ətrengtn	+	F	A / BBB+	A- / BBB	BBB+ / BBB-	BBB / BB+	
ב ב	Adequate		A- / BBB	BBB+ / BBB-	BBB / BB+	BBB-/BB	
	-		BBB+ / BBB-	BBB / BB+	BBB- / BB	BB+/BB-	
2	+	F	BBB / BB+	BBB- / BB	BB+ / BB-	BB / B+	
	Moderate		BBB- / BB	BB+ / BB-	BB / B+	BB- / B	
•	-		BB+/BB-	BB / B+	BB- / B	B+ / B-	
	+	-	BB / B+	BB- / B	B+ / B-	B / CCC	
	Weak		BB- / B	B+ / B-	B/CCC	B- / CCC	
	-		B+ / B-	B / CCC	B- / CCC	CCC	
	+	F	B / CCC	B- / CCC			
	Very Weak		B- / CCC	CCC	CC	C	
	-		ccc	CCC			

Source: Scope Ratings.

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4.2 Non-capitalised institutions

Figure 17a: Mapping institutional and financial profiles for non-capitalised institutions

Intrinsic St	onath			Institutional Prof	ile	
Intrinsic St	engui	Very Strong	Strong	Moderate	Weak	Very Weak
	Excellent	Excellent	Excellent	Excellent	Very Strong	Very Strong
<u>e</u>	Very Strong	Excellent	Very Strong	Very Strong	Very Strong	Strong
Profile	Strong	Very Strong	Strong	Strong	Strong	Adequate
	Adequate	Strong	Adequate	Adequate	Adequate	Moderate
Financial	Moderate	Adequate	Moderate	Moderate	Moderate	Weak
Œ	Weak	Moderate	Weak	Weak	Weak	Very Weak
	Very Weak	Weak	Very Weak	Very Weak	Very Weak	Very Weak

Figure 17b: Mapping intrinsic strength and shareholder support for non-capitalised institutions

Indicative	Poting				Intrinsic Streng	th		
indicative	Kating	Excellent	Very Strong	Strong	Adequate	Moderate	Weak	Very Weak
	AAA	AAA	AAA	AAA	AAA	AAA	AAA / AA+	AA+ / A+
	AA+	AAA	AAA	AAA	AAA	AAA	AAA / AA	AA / A
	AA	AAA	AAA	AAA	AAA	AAA / AA+	AA+ / AA-	AA- / A-
	AA-	AAA	AAA	AAA	AAA	AAA / AA	AA / A+	A+ / BBB+
	A+	AAA	AAA	AAA	AAA / AA+	AA+/AA-	AA- / A	A / BBB
₩	Α	AAA	AAA	AAA	AAA / AA	AA / A+	A+ / A-	A-/ BBB-
opor	Α-	AAA	AAA	AAA / AA+	AA+ / AA-	AA- / A	A / BBB+	BBB+ / BB+
Shareholder Support	BBB+	AAA	AAA	AAA / AA	AA / A+	A+ / A-	A-/BBB	BBB / BB
oldei	BBB	AAA	AAA / AA+	AA+ / AA-	AA- / A	A / BBB+	BBB+/BBB-	BBB- / BB-
areho	BBB-	AAA	AAA / AA	AA / A+	A+ / A-	A- / BBB	BBB/ BB+	BB+ / B+
Sha	BB+	AAA / AA+	AA+/AA-	AA- / A	A / BBB+	BBB+/BBB-	BBB-/BB	BB/B
	BB	AAA / AA	AA / A+	A+ / A-	A-/BBB	BBB/ BB+	BB+/BB-	BB- / B-
	BB-	AA+ / AA-	AA- / A	A / BBB+	BBB+ / BBB-	BBB- / BB	BB / B+	B+ / CCC
	B+	AA / A+	A+ / A-	A-/BBB	BBB/ BB+	BB+/BB-	BB- / B	B / CCC
	В	AA-/A	A / BBB+	BBB+ / BBB-	BBB-/BB	BB / B+	B+ / B-	B- / CCC
	B-	A+ / A-	A- / BBB	BBB/ BB+	BB+/BB-	BB- / B	B / CCC	CCC
	CCC	A / BBB+	BBB+ / BBB-	BBB- / BB	BB / B+	B+ / B-	B- / CCC	CCC

Source: Scope Ratings.

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5. Additional considerations

Additional considerations can be either credit positive, neutral or negative and are usually capped at one notch to determine the final rating. We will assign the mid-point rating within the three-notch indicative rating range in case of credit neutral considerations, which we expect in most instances. Conversely, in case of positive (negative) additional considerations, we will choose the top (bottom) rating of the three-notch indicative rating range.

Additional considerations allow us to consider rating relevant factors that may not be captured consistently in the scorecards, usually because they only apply under specific circumstances or only to a subset of entities. In addition, when material credit considerations are not yet captured in the scorecards, they allow us to inform our forward-looking credit assessment of the supranational. Adjustments relate to those already highlighted under the financial profile but could also relate to the below examples that may affect our views of a supranational's intrinsic strength and/or shareholder support, and thus, its creditworthiness.

Macro-economic environment

While our approach accounts for the counter-cyclical nature of supranationals' activities, a significant deterioration in the macro-economic environment, for example, driven by heightened economic or banking sector risks or geopolitical tensions in the countries of operation, may adversely affect the supranational's credit quality beyond those risks already captured in the scorecard. This may affect our assessments of a supranational's intrinsic profile as well as the likely support it may receive from shareholders. Our sovereign and banking sector risk assessments will inform our view in this regard.

Sensitivities

Our scorecard captures the main rating drivers to assess supranational entities. However, exceptional credit strengths or weaknesses may be under-represented by our scorecard, for example, with credit metrics significantly exceeding our applied thresholds. This may warrant, in exceptional cases, a more favourable or conservative final assessment. In addition, particularly at the lower end of the rating scale, the signals from our scorecards may be limited in capturing actual credit risks, which are typically non-linear as the credit quality deteriorates. In such instances, a more prudent assessment may inform our final rating decision. Finally, in rare instances, some of the factors captured in the scorecard may be less credit relevant than others. For example, in the case of meaningful grants or concessionary loans the asset quality assessment may be less credit relevant compared to other pillars. In such a case, we could consider an adjustment to our final credit assessment to reflect this consideration.

Operational history

Most supranationals have many years, if not decades, of operational and financial history, and thus well-established track records that inform our assessment. However, in the case of a limited track record, or instances in which a supranational's mandate and activities change to the extent that past information may not provide a good basis for expected future results, a more prudent assessment may inform our final rating decision.

Event risk

Unexpected events may also have an impact on a supranational's creditworthiness. These include, but are not limited to, exogenous shocks such as imposition of capital controls, cyber-attacks, litigation risk, and wars.

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6. Annexes

I Selected list of supranational entities

Region	Institution
	Council of Europe Development Bank
	European Bank for Reconstruction and Development
	European Company for the Financing of Railroad Rolling Stock
ø	European Financial Stability Facility*
Europe	European Investment Bank
面	European Investment Fund
	European Stability Mechanism
	European Union*
	Nordic Investment Bank
	International Bank for Reconstruction and Development (World Bank)
bal	International Finance Corporation
Global	International Finance Facility for Immunisation*
	International Fund for Agricultural Development*
	Asian Development Bank
Asia	Asian Infrastructure Investment Bank
	New Development Bank (BRICS Bank)
	African Development Bank
	African Export-Import Bank
	Africa Finance Corporation
÷.	Arab Monetary Fund
Eas	Arab Petroleum Investments Corp
ddle	Company for Habitat and Housing in Africa
& Mi	East African Development Bank
Africa & Middle East	Eastern and Southern African Trade and Development Bank
₹	Gulf Investment Corporation G.S.C.
	Islamic Development Bank
	Islamic Corporation for the Development of the Private Sector
	West Africa Development Bank
	Caribbean Development Bank
	Central American Bank for Economic Integration
S	Corporación Andina de Fomento
Americas	Inter-American Development Bank
Am	IDB-Invest
	Fondo Latinoamericano de Reservas
	North American Development Bank

Source: Scope Ratings. *Refers to non-capitalised institutions.

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II Mandates of supranational entities

The table below highlights the missions or mandates of a selection of supranationals.

Institution	Mandate/ Mission
African Development Bank	To spur sustainable economic development and social progress in its regional member countries to help reduce poverty
Asian Development Bank	Envisioning a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining efforts to eradicate extreme poverty in the region
Caribbean Development Bank	To be the leading catalyst for development resources into the region, working in an efficient, responsive and collaborative manner with borrowing member countries and other development partners towards the systematic reduction of poverty in their countries through social and economic development
European Investment Bank	The EIB is the European Union's bank. It is the only bank owned by and representing the interests of EU member states, working closely with other EU institutions to implement EU policy. The bank supports projects that make a significant contribution to growth and employment in Europe, focusing on: i) innovation and skills; ii) access to finance for smaller businesses; iii) infrastructure; and iv) climate and environment.
European Stability Mechanism	Established as an international financial institution by euro area member states to help euro area countries in severe financial distress
European Bank for Reconstruction and Development	To develop open and sustainable market economies in countries committed to, and applying, democratic principles
International Bank for Reconstruction and Development (World Bank)	The world's largest development bank; it provides financial products and policy advice to help countries reduce poverty and extend the benefits of sustainable growth to all of their people
Nordic Investment Bank	To finance projects that improve the productivity and benefit the environment of the Nordic and Baltic countries

Source: Respective websites, Scope Ratings

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III General capital increases

The table below highlights the timing and magnitude of capital increases of a selection of supranationals.

Institution	Capital increase
African Development Bank	1976: USD 0.5bn (general capital increase)
	1979: USD 6bn (general)
	1981: USD 2bn (general)
	1987: USD 15bn (general)
	1998: USD 8bn (general)
	2010: USD 63bn (general), 6% of which as paid-in
	2019: USD 115bn (general), increasing the capital base from USD 93bn to USD 208bn
Asian Development Bank	1971: USD 1.7bn to USD 2.8bn of general capital increase, of which 20% as paid-in
	1976: USD 4.8bn to USD 8.4bn (general; 10% as paid-in)
	1983: USD 8.2bn to USD 16bn (general; 5% as paid-in)
	1994: USD 25bn to USD 50bn (general; 2% as paid-in)
	2009: USD 110bn to USD 160bn (general, 4% as paid-in)
Caribbean Development Bank	2010: Ordinary capital increase of USD 1bn, consisting of an increase of paid-in capital by USD 200m
Council of Europe Development Bank	2022: Subscribed capital increase of EUR 4.25bn, raising paid-in capital from EUR 0.61bn to EUR 1.81bn.
European Investment Bank	2002: Increase subscribed capital from EUR 100bn to EUR 150bn, capitalised by the bank's reserves
	2012: Capital increase of EUR 10bn of paid-in capital with instalments until 2015, increasing paid-in capital from EUR 11.6bn to 21.6bn.
	2020: Poland and Romania increased their capital subscriptions by a combined EUR 5.5bn.
European Bank for Reconstruction and Development	2010: EUR 10bn increase in authorised capital (previously, authorised capital was EUR 20bn), consisting of EUR 1bn of paid-in capital, capitalised from the bank's reserves, and EUR 9bn of callable capital
International Bank for Reconstruction and	2011: General and selective capital increases of USD 86.2bn, with USD 5.1bn in paid-in capital to be paid over the five subsequent years
Development (World Bank)	2018: USD 7.5bn increase of paid-in capital, to be paid until September 2023, and USD 52.6bn increase of callable capital
Nordic Investment Bank	2010: Capital increase, raising the capital base by EUR 2bn to EUR 6.1bn via callable capital

Source: Respective websites, Scope Ratings

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IV Case study: Capitalised supranational

	Risk factors		Variables	Unit									Capitalised Institution	
	Nisk ractors				+4	+3	+2	+1	0	-1	-2	Value	Assessment	Notches
			Importance of mandate	Qualitative				Very High	High	Declining			Very High	
ije e		Mandate	Social factors	Qualitative				Strong	Medium/ N/A	Weak			Strong	1
Pro	Mandate & ESG		Environmental factors	Qualitative				Strong	Medium/ N/A	Weak			Medium/ N/A	
iona	(-2; +2)		Shareholder concentration	HHI					≤ 1500	> 1500		1200.0	Strong	
Institutional Profile		Governance	Shareholder control	%					≤ 25	> 25		17.0	Strong	1
Ins			Strategy and internal controls	Qualitative				Strong	Medium	Weak			Strong	
	Institutional Profile												Very Strong	
		Capital/ Potential	assets	%	≥ 30	< 30; ≥ 20	< 20; ≥ 15	< 15; ≥ 10	< 10; ≥ 7.5	< 7.5; ≥ 5	< 5	18.0	High	2
_	Capitalisation (-3; +6)	Capital/ Actual as	ssets*	%				≥ 30	< 30			20.0	Adequate/ No uplift	0
engt	(5, 15)	Profitability (Retu	rn on equity)	%				≥ 3	< 3; ≥ 0	< 0		3.0	Adequate	1
c Str	Trend (-1; +1)													0
Intrinsic Strength	Asset quality	Portfolio quality	Incl. risk mitigants	Qualitative			Very Strong	Strong	Adequate	Moderate	Weak	Very Strong	Very Strong	2
rofile International	(-3; +5)	Asset performand	ce NPLs	% total loans		≤ 0.5	> 0.5; ≤ 1	> 1; ≤ 3	> 3; ≤ 5	> 5		1.5	Strong	1
Intr <mark>Financial Profile</mark>	Trend (-1; +1)													0
nano		Liquid assets rati	0	%	> 100	≤ 100; > 75	≤ 75; > 50	≤ 50; > 25	≤ 25; > 15	≤ 15; > 10	≤ 10	85.0	Very Strong	3
Œ	Liquidity & funding (-4; +8)		Maturity gap	Multiple				≥ 0.75	< 0.75; ≥ 0.5	< 0.5		0.6	Adequate	0
		Funding	Funding volume	EUR or USD bn			≥ 25	< 25; ≥ 5	< 5; ≥ 2	< 2		5.0	Strong	1
			Currency diversification	Top 1 share				≤ 70	> 70			75.0	Adequate	0
	Trend (-1; +1)													0
	Financial Profile												Strong (+)	
_	Intrinsic Strength												Very Strong	
		Weighted averag	e rating of key shareholders	Avg. rating		≥ AA-	≥ A-	≥ BBB-	< BBB-				А	
port	Shareholder strength	Share of portfolio	related to key shareholders	%					≤ 50	> 50		 27.0	Low / No adjustment	2
Sup	(0; +3)	Adjusted key sha	reholder rating	Avg. rating									A	
older				%			≥ 100	< 100; ≥ 20	< 20			16.0		
Shareholder Support	Extraordinary Support (0; +2)	Callable capital [rated ≥ AA-]/ Actual assets Additional support mechanisms		Qualitative			Very Strong	Strong	N/A			N/A	Adequate	0
Ŝ	Shareholder Support	, raditional dappor	· moonanomo	Qualitativo			Tony on ong	Chong					Very High	
	Gnarenoider Support			Indicative Rating									AA+ / AA-	
	Additional considerations (4	1)		mulcative Rating										
	Additional considerations (-1; +	1)		Final Rating									Neutral AA	

Source: Scope Ratings

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Rating Methodology Supranational Entities

V Case study: Non-capitalised supranational

	Risk factors		Variables	Unit								Non-o	apitalised Institution	
	Non lactors		variables	Onic	+4	+3	+2	+1	0	-1	-2	Value	Assessment	Notches
<u>.</u>	Key shareholder rating	Weighted average	rating of key shareholders	AAA - CCC									AA	
Shareholder Support	Key shareholders & exposures (-1; 0)	Share of portfolio related to key shareholders		%					≤ 50	> 50		0.0	Low	0
Sup	Extraordinary Support (0; +2)	Additional support	mechanisms	Qualitative			Very Strong	Strong	N/A				N/A	0
o)	Shareholder Support												AA	
			Importance of mandate	Qualitative				Very High	High	Declining			High	
dile		Mandate	Social factors	Qualitative				Strong	Medium/ N/A	Weak			Strong	0
- Pro	Mandate & ESG		Environmental factors	Qualitative				Strong	Medium/ N/A	Weak			Medium/ N/A	
Institutional Profile	(-2; +2)		Shareholder concentration	HHI					≤ 1500	> 1500		1400.0	Strong	
titut		Governance risks	Shareholder control	%					≤ 25	> 25		29.0	Moderate/Weak	0
Ë			Strategy and internal controls	Qualitative				Strong	Medium	Weak			Strong	
£	Institutional Profile												Moderate	
Strength		Liquid assets ratio		%	> 100	≤ 100; > 75	≤ 75; > 50	≤ 50; > 25	≤ 25; > 15	≤ 15; > 10	≤ 10	55.0	Strong	2
<u>ن</u> ک	Liquidity & funding		Maturity gap	Multiple				> 0.75	< 0.75; ≥ 0.5	< 0.5		0.6	Adequate	0
Intrinsic ofile	(-4; +8)	Funding	Funding volume	EUR or USD bn			≥ 25	< 25; ≥ 5	< 5; ≥ 2	< 2		20.0	Strong	1
Intriu Profile			Currency diversification	Top 1 share				≤ 70	> 70			50.0	Strong	1
cial	Trend (+1; -1)													0
Financial	Asset quality	Portfolio quality	Incl. risk mitigants	Qualitative			Very Strong	Strong	Adequate	Moderate	Weak	Moderate	Moderate	-1
ш	(-3; +5)	Asset performance	NPLs	% total loans		≤ 0.5	> 0.5; ≤ 1	> 1; ≤ 3	> 3; ≤ 5	> 5		4.1	Adequate	0
	Trend (+1; -1)													0
	Financial Profile												Moderate	
	Intrinsic Strength												Moderate	
				Indicative Rating									AAA / AA+	
	Additional considerations (-1; +1))											Neutral	
				Final Rating									AA+	
	· · · · · · · · · · · · · · · · · · ·													

Source: Scope Ratings

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VI: Case study: Portfolio quality

	Exposure	% Mandated assets	Materiality	Borrower Quality
Loans	Sovereign	30	High	bbb
Loans	Private Sector	70	High	bb
Guarantees		0	Low	N/A
Portfolio quali	ity (based on avg. borrower quality)		bb

Portfolio quality (initial assessment)	Very Strong	Strong	Adequate	Moderate	Weak
Indicative borrower quality	aaa/aa	а	bbb	bb	b/ccc
Notches	+2	+1	0	-1	-2

Adjustments		Indicator				Asse ssm	ent/ Thr	resholds	3		Comment	
Points			+5	+4	+3	+2	+1	0	-1	-2	-3	- Comment
Credit Protection	Sovereign PCS	% of loan portfolio	100	≥ 80	≥ 60	≥ 40	≥ 20	< 20				Supranational benefits from PCS for sovereign exposures
Credit Protection	Private sector secured	% of loan portfolio	100	≥ 00	2 00	≥ 40	2 40 2 20 < 20					About one third of private sector exposures assesed as well protected
	Geography	HHI				≤ 1000	≤ 2000	> 2000				Very well diversified across countries
Diversification	Sector	HHI					≤ 2000	> 2000				Well diversified across sectors
	Top 10 exposures	% of loan portfolio				≤ 25	≤ 75	> 75				Well diversified across single exposures
Equity Exposure		% of equity							> 25	> 50	> 75	Meaningful equity exposure

	Total points		+4								
	Adjustments		1	category							
Portfolio quality (final assessment)	Very Strong	Strong	Adequate	Moderate	Weak						
Notches	+2	+1	0	-1	-2						

Three points usually correspond to one category assessment.

Source: Scope Ratings

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VII Glossary

An overview of the selected variables and their definitions is presented below. Unless stated otherwise, we round the calculations to full numbers.

1. Institutional Profile

Environmental exposure

Calculated using the transition and physical risk scores from the sovereign methodology (ranging from 1 to 100) of sovereigns comprising the top 10 country exposures. Weights are determined by the share of total outstanding exposures of those ten countries

Shareholder concentration

The concentration of shareholders equals the sum of the squared capital shares of shareholders multiplied by 10,000 to retrieve the Herfindahl-Hirschman Index. Rounded to the nearest 100.

Shareholder control

The share of the largest shareholder per the supranational's capital structure (or other mechanism to determine ownership such as guarantees or revenue/budgetary contributions for non-capitalised institutions).

2. Financial Profile

Unless stated otherwise, we calculate a three-year weighted average for the below variables, assigning T-1 60%, T-2 30% and T-3 10%, and round to a full number.

Capitalisation

Assesses the supranational's leverage assuming the maximum mandate-related assets (usually loans, guarantees and equity investments) allowed by its mandate. Capital includes the sum of paid-in capital, surplus and reserves, and retained profit. Actual leverage uses actual outstanding mandated assets as opposed to those under the assumption of full utilisation.

Return on equity

Annual profits (excluding other comprehensive income) net of provisions as a share of equity (paid-in capital, surplus, and reserves).

Liquid assets ratio

Liquid assets include the value of cash, cash equivalents and treasury assets with a maturity of up to 12 months; treasury assets with a maturity greater than 12 months that have a rating of AA- or above (as reported by the supranational); and committed, undrawn and unconditional credit lines from supranational counterparties or national development banks rated AA- or higher. The sum of liquid assets is then divided by total liabilities maturing within 12 months plus annual disbursements. Expected cash inflows from loans are excluded. Rounded to the nearest fifth.

Maturity gap

Assets with a maturity from one to five years over liabilities with a maturity from one to five years. Rounded to nearest fifth.

Funding volume

Total annual issuance of debt securities, measured in the main funding currency, usually in euros or US dollars.

Currency diversification

The diversification of the issuance portfolio is measured by the share of the main funding currency in issuance (before swaps) relative to total outstanding debt securities.

Portfolio diversification

Geographical (sectoral) concentration is calculated by using the sum of squared outstanding loan shares in each of the top 10 country exposures as a percentage of total loans multiplied by 10,000 (HHI). Rounded to nearest 100. In addition, we sum the portfolio share of the top 10 single exposures. Latest data.

Non-performing loans

The share of non-performing loans over total gross loans includes the total volume of loans in arrears. Rounded to nearest decimal.

3. Shareholder support

Key shareholder rating

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Average capital-weighted rating of key shareholders that constitute at least 75% of share capital starting with largest shareholder. For non-capitalised institutions, we will determine the key shareholder rating on the basis of variables that proxy – as best as possible – the relative relevance of shareholders. Variables include voting rights, guarantees, budgetary contributions or annual pledges, nominal GDP and/or the population size or similar factors. The 75% threshold usually also applies.

Share of portfolio related to key shareholders

Sum of total portfolio exposures on the lending side in the countries of the key shareholders rated below AA-.

Callable capital/actual assets

The numerator includes the callable capital of highly rated shareholders, defined as those AA- rated or above. Actual assets refer to outstanding mandated assets.

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7. Bibliography

Annual reports, financial statements and investor presentations of several supranationals, including the African Development Bank, the Asian Development Bank, the European Investment Bank, the European Stability Mechanism, the European Union, and the International Bank for Reconstruction and Development.

2017 Joint Report on Multilateral Development Banks' Climate Finance.

2017 Joint IDFC-MDB Statement: Together Major Development Finance Institutions Align Financial Flows with the Paris Agreement.

Acharya, V., Engle, R., and Pierret, D. (2014): Testing Macroprudential Stress Tests: The Risk of Regulatory Risk Weights, Journal of Monetary Economics, 65, 36-53.

Chen, D., Muller, P., and Wagué, H. (2017): Multilateral Development Bank Credit Rating Methodology: Overcoming the Challenges in Assessing Relative Credit Risk in Highly Rated Institutions Based on Public Data, Bank of Canada discussion paper.

Basel Committee on Banking Supervision (December 2017): High-level Summary of Basel III Reforms.

Basel Committee on Banking Supervision, Basel III (January 2013): The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools.

Basel Committee on Banking Supervision (April 2016): Standards Interest Rate Risk in the Banking Book.

Basel Committee on Banking Supervision (June 2011): Principles for the Sound Management of Operational Risk.

Boughton, J. (October 2001): Silent Revolution: The International Monetary Fund 1979-1989, Chapter 16.

Caldecott, B., Howarth, N., and McSharry, P. (2013): Stranded Assets in Agriculture: Protecting Value from Environment-Related Risks. Smith School of Enterprise and the Environment, University of Oxford.

Caldecott, B., and McDaniels, J. (2014): Financial Dynamics of the Environment: Risks, Impacts, and Barriers to Resilience, Oxford. Stranded Generation Assets: Implications for European Capacity Mechanisms, Energy Markets and Climate Policy.

European Banking Authority: Interactive Single Rulebook, Exposures to Multilateral Development Banks.

European Commission (2004): Guidelines on the Assessment of Horizontal Mergers under the Council Regulation on the Control of Concentrations between Undertakings.

European Central Bank (April 2014): Eurosystem Credit Assessment Framework for Monetary Policy Operations, Monthly Bulletin.

Haldane, A. G., and Madouros, V. (2012): The Dog and the Frisbee, speech given at the Federal Reserve Bank of Kansas City's 36th economic policy symposium. The Changing Policy Landscape, Jackson Hole, Wyoming, August 2012.

International Monetary Fund (2009): Global Financial Stability Report, Chapter 3, September 2009, International Monetary Fund.

Inter-American Development Bank (2016): Stranded Assets: A Climate Risk Challenge.

Galindo, A., and Panizza, U. (2018): The Cyclicality of International Public Sector Borrowing in Developing Countries: Does the Lender Matter? World Development, vol. 112, p. 119-135.

Harnett, I., Edstrom, E., and Harnett, E. (2014): Stranded Assets A New Concept but a Critical Risk, London.

Humphrey, C., and Michaelowa, K. (2013): Shopping for Development: Multilateral Lending, Shareholder Composition and Borrower Preferences, World Development, vol. 44, pp. 142-155, April 2013.

Humphrey, C. (2015): Are Credit Rating Agencies Limiting the Operational Capacity of Multilateral Development Banks? Paper commissioned by the G24 as part of its work program on enhancing the role of MDBs in infrastructure finance, October 2015, Zürich.

Humphrey, C. (2017a): Six proposals to strengthen the finances of multilateral development banks, ETH Zürich, Working Paper.

3 August 2023 28/30



Sovereign and Public Sector

Humphrey, C. (2017b): He who pays the piper calls the tune: Credit rating agencies and multilateral development banks, The Review of International Organizations, vol. 12 (2), pp. 281-306.

Kapur, D., and Rychaudhuri, A. (2014): Rethinking the Financial Design of the World Bank, Center for Global Development, Working Paper 352, January 2014.

Munich Re (2018): Hurricanes Cause Record Losses in 2017 - The Year in Figures.

Nachmany et al. (2014): The 2015 Global Climate Legislation Study.

Nelson, R. (2018): Multilateral Development Banks: Overview and Issues for Congress, Congressional Research Service.

Schäfer, A. (2016): Beating the Black Box of Risk-Weighted Capital: Is a Leverage Ratio Justified? University of Mainz

Schlegl, M., Trebesch, C., and Wright, M. (2015): Sovereign debt repayments: Evidence on seniority, VOX CEPR.

Schumacher, J., Trebesch, C., Enderlein, H. (2018): Sovereign Defaults in Court, ECB Working Paper Series.

Settimo, R. (2017): Towards a more efficient use of multilateral development banks' capital. Bank of Italy.

Sun, T. (2011): Identifying Vulnerabilities in Systemically-Important Financial Institutions in a Macrofinancial Linkages Framework, International Monetary Fund Working Paper No. 11/111, Washington DC.

Task Force on Climate-Related Financial Disclosures (2017): Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures.

United Nations (2015): Paris Agreement.

World Bank Group, Inter-Agency Task Force on Financing for Development (2016): Multilateral Development Banks, Issue Brief Series.

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